## What is claimed is:

1. A compound of formula I, a pharmaceutically acceptable salt thereof, diastereomers, enantiomers, or mixtures thereof:

$$R^2$$
 $R^3$ 
 $R^3$ 
 $R^4$ 
 $R^5$ 

wherein

5

R<sup>1</sup> is selected from C<sub>6-10</sub>aryl and C<sub>2-6</sub>heteroaryl, wherein said C<sub>6-10</sub>aryl and C<sub>2-6</sub>heteroaryl are optionally substituted with one or more groups selected from -R,

-NO<sub>2</sub>, -OR, -Cl, -Br, -I, -F, -CF<sub>3</sub>, -C(=O)R, -C(=O)OH, -NH<sub>2</sub>, -SH, -NHR, -NR<sub>2</sub>, -SR,
-SO<sub>3</sub>H, -SO<sub>2</sub>R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR<sub>2</sub>, -NRC(=O)R, and
-NRC(=O)-OR, wherein R is, independently, a hydrogen or C<sub>1-6</sub>alkyl; and
R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> are, independently, selected from hydrogen, C<sub>1-6</sub>alkyl, and
C<sub>3-6</sub>cycloalkyl, wherein said C<sub>1-6</sub>alkyl and C<sub>3-6</sub>cycloalkyl are optionally substituted

with one or more groups selected from -R, -NO<sub>2</sub>, -OR, -Cl, -Br, -I, -F, -CF<sub>3</sub>, -C(=O)R,
-C(=O)OH, -NH<sub>2</sub>, -SH, -NHR, -NR<sub>2</sub>, -SR, -SO<sub>3</sub>H, -SO<sub>2</sub>R, -S(=O)R, -CN, -OH, C(=O)OR, -C(=O)NR<sub>2</sub>, -NRC(=O)R, and -NRC(=O)-OR, wherein R is,
independently, a hydrogen or C<sub>1-6</sub>alkyl.

20 2. A compound according to claim 1,

wherein R<sup>1</sup> is selected from phenyl; pyridyl; thienyl; furyl; imidazolyl; triazolyl; pyrrolyl; thiazolyl; and N-oxido-pyridyl, wherein R<sup>1</sup> is optionally

substituted with one or more groups selected from  $C_{1-6}$ alkyl, halogenated  $C_{1-6}$ alkyl, -  $NO_2$ , - $CF_3$ ,  $C_{1-6}$  alkoxy, chloro, fluoro, bromo, and iodo;

 $R^2$ ,  $R^3$ , and  $R^4$  are, independently,  $C_{1-3}$  alkyl or halogenated  $C_{1-3}$  alkyl;

R<sup>5</sup> is selected from hydrogen, C<sub>1-6</sub>alkyl, and C<sub>3-6</sub>cycloalkyl, wherein said C<sub>1-6</sub> falkyl and C<sub>3-6</sub>cycloalkyl are optionally substituted with one or more groups selected from C<sub>1-6</sub>alkyl, halogenated C<sub>1-6</sub>alkyl, -NO<sub>2</sub>, -CF<sub>3</sub>, C<sub>1-6</sub> alkoxy, chloro, fluoro, bromo, and iodo.

- 3. A compound according to claim 1,
- wherein R<sup>1</sup> is selected from phenyl; pyridyl; thienyl; furyl; imidazolyl; pyrrolyl; and thiazolyl, wherein R<sup>1</sup> is optionally substituted with one or more groups selected from C<sub>1-6</sub>alkyl, halogenated C<sub>1-6</sub>alkyl, -NO<sub>2</sub>, -CF<sub>3</sub>, C<sub>1-6</sub> alkoxy, chloro, fluoro, bromo, and iodo;

 $R^2$ ,  $R^3$ , and  $R^4$  are, independently,  $C_{1-3}$  alkyl or halogenated  $C_{1-3}$  alkyl; and  $R^5$  is hydrogen.

- 4. A compound according to claim 1,
  wherein R<sup>1</sup> is selected from phenyl, pyridyl, thienyl, furyl, imidazolyl,
  pyrrolyl, and thiazolyl;
- 20  $R^2$  and  $R^3$  are ethyl;  $R^4$  is  $C_{1-3}$ alkyl; and  $R^5$  is hydrogen.

15

- 5. A compound according to claim 1, wherein the compound is selected from:
- 4-{[3-(acetylamino)phenyl][1-(thien-2-ylmethyl)piperidin-4-ylidene]methyl}-N,N-diethylbenzamide;
  - 4- $\{[3-(acetylamino)phenyl][1-(2-furylmethyl)piperidin-4-ylidene]methyl\}-N,N-diethylbenzamide;$
- 4-[[3-(acetylamino)phenyl][1-(phenylmethyl)-4-piperidinylidene]methyl]-N,N-30 diethyl-benzamide;

- 4-[[3-(acetylamino)phenyl][1-(3-thienylmethyl)-4-piperidinylidene]methyl]-*N*,*N*-diethyl-benzamide;
- 4-[[3-(acetylamino)phenyl][1-(3-pyridinylmethyl)-4-piperidinylidene]methyl]-*N*,*N*-diethyl-benzamide;
- 5 4-[[3-(acetylamino)phenyl][1-(4-pyridinylmethyl)-4-piperidinylidene]methyl]-*N*,*N*-diethyl-benzamide;
  - 4-{[3-(acetylamino)phenyl][1-(pyridin-2-ylmethyl)piperidin-4-ylidene]methyl}-N,N-diethylbenzamide;
  - 4-{[3-(acetylamino)phenyl][1-(1,3-thiazol-4-ylmethyl)piperidin-4-ylidene]methyl}-
- 10 N,N-diethylbenzamide;
  - 4-{[3-(acetylamino)phenyl][1-(1,3-thiazol-5-ylmethyl)piperidin-4-ylidene]methyl}-N,N-diethylbenzamide; and pharmaceutically acceptable salts thereof.
  - 6. A compound according to any one of claims 1-5 for use as a medicament.

15

25

30

- 7. The use of a compound according to any one of claims 1-5 in the manufacture of a medicament for the therapy of pain, anxiety or functional gastrointestinal disorders.
- 20 8. A pharmaceutical composition comprising a compound according to any one of claims 1-5 and a pharmaceutically acceptable carrier.
  - 9. A method for the therapy of pain in a warm-blooded animal, comprising the step of administering to said animal in need of such therapy a therapeutically effective amount of a compound according to any one of claims 1-5.
  - 10. A method for the therapy of functional gastrointestinal disorders in a warm-blooded animal, comprising the step of administering to said animal in need of such therapy a therapeutically effective amount of a compound according to any one of claims 1-5.

11. A process for preparing a compound of formula I, comprising:

$$R^2$$
 $R^3$ 
 $R^4$ 
 $R^5$ 
 $R^4$ 

reacting a compound of formula II with X-C(=O)-R<sup>4</sup> or R<sup>4</sup>C(=O)-OC(=O)R<sup>4</sup>:

$$R^2$$
 $R^3$ 
 $R^4$ 
 $R^5$ 
 $R^1$ 
 $R^1$ 

wherein

10

15

5

 $R^1$  is selected from  $C_{6-10}$  aryl and  $C_{2-6}$  heteroaryl, wherein said  $C_{6-10}$  aryl and  $C_{2-6}$  heteroaryl are optionally substituted with one or more groups selected from -R, -NO<sub>2</sub>, -OR, -Cl, -Br, -I, -F, -CF<sub>3</sub>, -C(=O)R, -C(=O)OH, -NH<sub>2</sub>, -SH, -NHR, -NR<sub>2</sub>, -SR, -SO<sub>3</sub>H, -SO<sub>2</sub>R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR<sub>2</sub>, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or  $C_{1-6}$  alkyl;

 $R^2$ ,  $R^3$ ,  $R^4$  and  $R^5$  are, independently, selected from hydrogen,  $C_{1-6}$ alkyl, and  $C_{3-6}$ cycloalkyl, wherein said  $C_{1-6}$ alkyl and  $C_{3-6}$ cycloalkyl are optionally substituted

with one or more groups selected from -R, -NO<sub>2</sub>, -OR, -Cl, -Br, -I, -F, -CF<sub>3</sub>, -C(=O)R, -C(=O)OH, -NH<sub>2</sub>, -SH, -NHR, -NR<sub>2</sub>, -SR, -SO<sub>3</sub>H, -SO<sub>2</sub>R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR<sub>2</sub>, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or  $C_{1-6}$ alkyl; and

5 X is Cl, Br or I.

12. A process for preparing a compound of formula I, comprising:

$$R^2$$
 $R^3$ 
 $R^4$ 
 $R^5$ 
 $R^4$ 

reacting a compound of formula III with R<sup>1</sup>-CHO or R<sup>1</sup>-CH<sub>2</sub>X:

$$R^2$$
 $R^3$ 
 $R^3$ 
 $R^5$ 
 $R^5$ 

wherein

R<sup>1</sup> is selected from C<sub>6-10</sub>aryl and C<sub>2-6</sub>heteroaryl, wherein said C<sub>6-10</sub>aryl and C<sub>2-6</sub>heteroaryl are optionally substituted with one or more groups selected from -R, -NO<sub>2</sub>, -OR, -Cl, -Br, -I, -F, -CF<sub>3</sub>, -C(=O)R, -C(=O)OH, -NH<sub>2</sub>, -SH, -NHR, -NR<sub>2</sub>, -SR,

-SO<sub>3</sub>H, -SO<sub>2</sub>R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR<sub>2</sub>, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or  $C_{1-6}$ alkyl;

 $R^2$ ,  $R^3$ ,  $R^4$  and  $R^5$  are, independently, selected from hydrogen,  $C_{1\text{-}6}$ alkyl, and  $C_{3\text{-}6}$ cycloalkyl, wherein said  $C_{1\text{-}6}$ alkyl and  $C_{3\text{-}6}$ cycloalkyl are optionally substituted with one or more groups selected from -R, -NO<sub>2</sub>, -OR, -Cl, -Br, -I, -F, -CF<sub>3</sub>, -C(=O)R, -C(=O)OH, -NH<sub>2</sub>, -SH, -NHR, -NR<sub>2</sub>, -SR, -SO<sub>3</sub>H, -SO<sub>2</sub>R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR<sub>2</sub>, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or  $C_{1\text{-}6}$ alkyl; and

X is Cl, Br or I.

10

5

## 13. A compound of formula III:

$$\mathbb{R}^2$$
 $\mathbb{R}^3$ 
 $\mathbb{R}^3$ 
 $\mathbb{R}^5$ 
 $\mathbb{R}^5$ 

wherein

15

20

R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> are, independently, selected from hydrogen, C<sub>1-6</sub>alkyl, and C<sub>3-6</sub>cycloalkyl, wherein said C<sub>1-6</sub>alkyl and C<sub>3-6</sub>cycloalkyl are optionally substituted with one or more groups selected from -R, -NO<sub>2</sub>, -OR, -Cl, -Br, -I, -F, -CF<sub>3</sub>, -C(=O)R, -C(=O)OH, -NH<sub>2</sub>, -SH, -NHR, -NR<sub>2</sub>, -SR, -SO<sub>3</sub>H, -SO<sub>2</sub>R, -S(=O)R, -CN, -OH, -C(=O)OR, -C(=O)NR<sub>2</sub>, -NRC(=O)R, and -NRC(=O)-OR, wherein R is, independently, a hydrogen or C<sub>1-6</sub>alkyl.